

IRON AGE

FARM, GARDEN AND ORCHARD TOOLS

AMERICAN FACTORY
BATEMAN M'FG CO.
GRENLOCH, NEW JERSEY

CANADIAN FACTORY
The BATEMAN-WILKINSON CO., Limited
TORONTO, ONTARIO

TOOLS ARE CARRIED IN STOCK AT CENTERS OF DISTRIBUTION.
LIBERAL STOCKS OF SUITABLE TOOLS FOR EACH VICINITY ARE
CARRIED BY THE BEST CLASS OF IMPLEMENT AND HARDWARE
DEALERS IN THE COUNTRY.

100 PER CENT POTATO PLANTING



TWO FIELDS AND THE STORY OF 40 CENTS



IF NOT HANDLED BY YOUR LOCAL DEALER, WRITE US FOR
NEAREST ADDRESS WHERE TOOLS CAN BE SEEN AND EXPLAINED

100 Klein's Bateman Mfg Co. Collection

Two Fields and the Story of Forty Cents

Two fields adjoined, ten acres in each; the soil was the same and the time the same, but one was owned by "The Man who Didn't Think" and the other by "The Man who Knew." Both planted potatoes, for there was always a market, and the fields were so large that each bought a Planter.

"The Man who Knew" selected the machine that planted every hill with never a miss or a double. He called it the "100% Planter." But it required a boy on the back to make corrections by hand—to take one seed piece from the pocket where there were two and put one where there was none. It cost 40 cents an acre for the boy, but "The Man who Knew" couldn't afford "doubles" that waste his seed and that sometimes make the potatoes small, nor "skips" that wasted fertilizer, labor and land.

"The Man who Didn't Think" "guessed it didn't make much difference if all the hills were not planted" and bought a machine that he could operate alone.

The season was good for potatoes and treated both men alike, but in one field there was a perfect stand while the other showed many misses. "The Man who Knew"

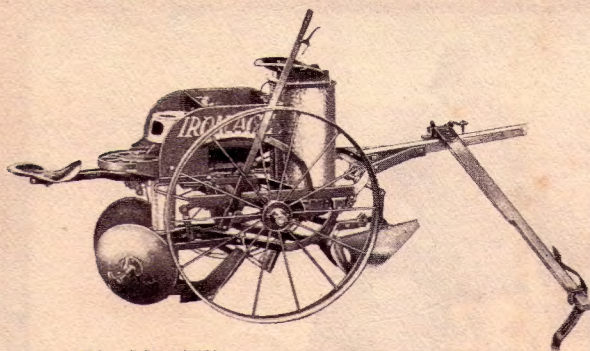
dug 200 bushels to the acre, at 90 cents a bushel, or \$180 per acre. But "The Man who Didn't Think" was 10% under his neighbor. He harvested but 180 bushels to the acre, at 90 cents a bushel or \$162 per acre.

"The Man who Knew" made \$18 an acre more than his neighbor—less 40 cents, and his Planter, an "Iron Age," had paid its own bill more than twice.

The story of 40 cents is only an average case and practical men will tell you that other types of planters often have a 15 or 20% loss. A yield of 250 bushels an acre at \$1.00 per bushel (not at all uncommon) and 20% loss means a loss of \$50 per acre.

If this point interests you we want to tell you something about the new construction of this machine, how it does its work and the different kinds of work it can do. It has been worth while for us to prepare and print this book—we hope it will prove equally profitable for you to read it.

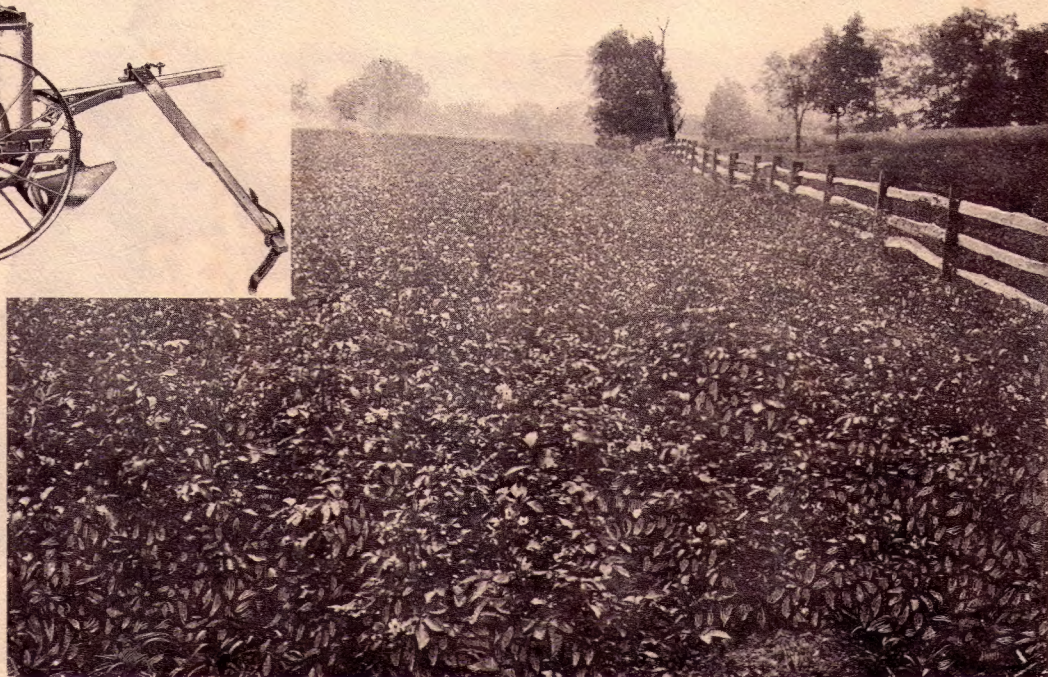
BATEMAN M'F'G CO.
GRENLOCH, N. J.



The Man Who Planted this Field Used an "Iron Age."

He writes: "I prefer a two-man planter, I want a piece at every place—no misses." "The man on the rear seat will have no trouble to keep the wheel filled and have the team move right along."

The "Iron Age" plants by machine—the boy or man on the rear seat simply makes corrections.



Planted by "A Man Who Knew"

New Steel Frame Steel Box 100 per cent. Potato Planter

Without changing the style or operation of the Planter in any way, it has been rebuilt—a steel angle frame in place of the heavy casting and wood bed pieces, separate bearing boxes for feed drive shaft instead of being part of the big cast frame, a steel seed box in place of wood. These changes accomplish several things:

Lighter Weight by about 60 pounds—less for the horses to draw. The machine is, as always, in perfect balance.

Stronger, although much simpler in construction—nothing can be better than steel angles for the frame—they are practically indestructible.

Simpler in construction—allows you to get at all of the working parts easily.

Cheaply Repaired. No heavy frame to buy in case of accident and the separate boxes for feed shaft are readily removed.

More Capacity for the seed. The New Steel Box measures the same outside but takes up $\frac{7}{8}$ inch less room, all around, inside. Seed box extension can be furnished. (See pages 4 and 8.)

These points are all gain over last year's machine—nothing is lost in field work. The new machine has been thoroughly tested under heavy conditions and its work is fully up to "Iron Age" standards:

Automatic handling of the seed with certainty that necessary corrections will be made.

Every seed piece is placed in the ground at the right distance apart and no two in the same place.

No injury to seed, for pickers are not used.

Uniform depth of planting and covering.

Straight line planting—seed is placed in a groove—easy to cultivate, spray and dig.

Even spacing, from 12 to 24 inches apart in the row.

Sows fertilizer at same time, but none where it touches the seed.

Furnished with or without fertilizer distributor.

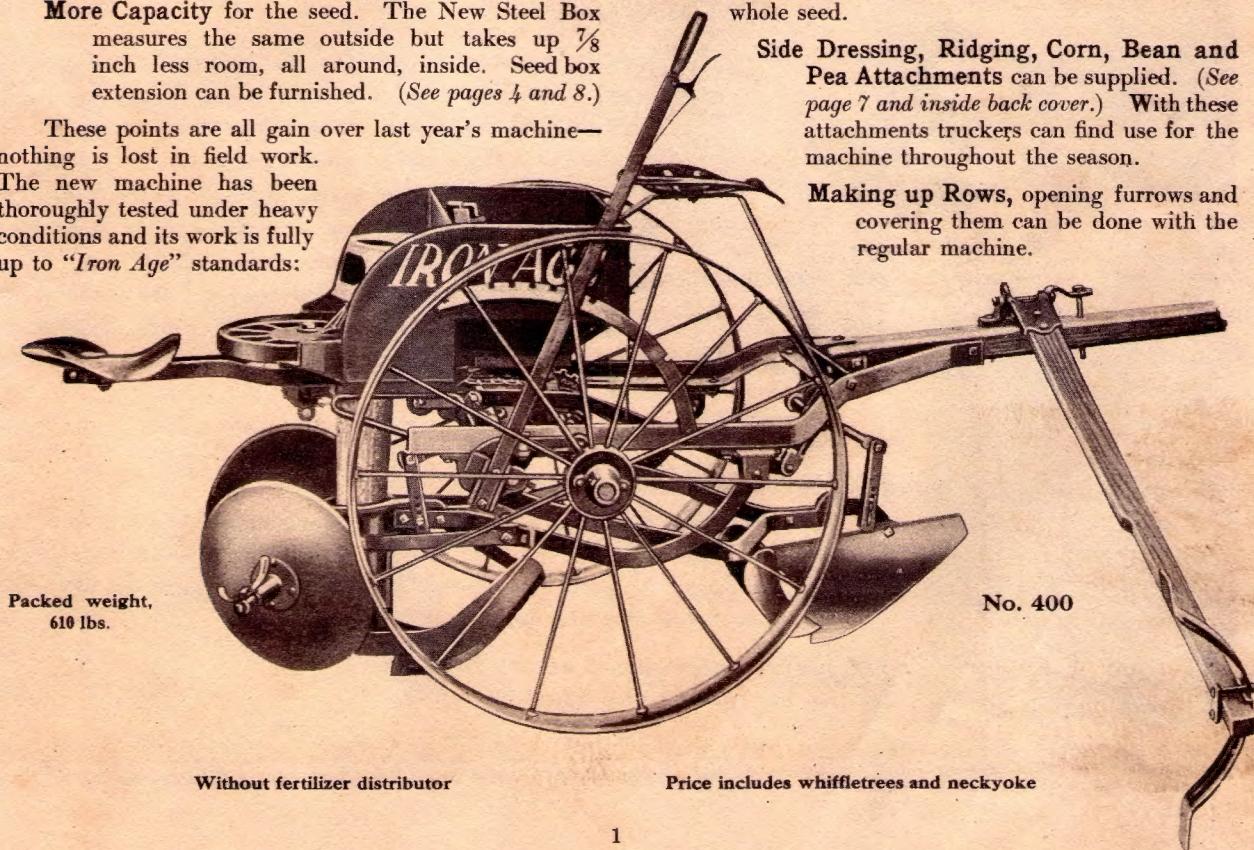
Fertilizer distributor in two sizes—for half or whole sack. (See pages 4-6.)

Four sizes opening plows to choose from. (See page 8.)

Provision for small, medium or large seed, cut or whole seed.

Side Dressing, Ridging, Corn, Bean and Pea Attachments can be supplied. (See page 7 and inside back cover.) With these attachments truckers can find use for the machine throughout the season.

Making up Rows, opening furrows and covering them can be done with the regular machine.



Packed weight,
610 lbs.

No. 400

Without fertilizer distributor

Price includes whiffletrees and neckyoke

Steel Frame Potato Planter

No injury to seed handled in this way. All of this work is automatic

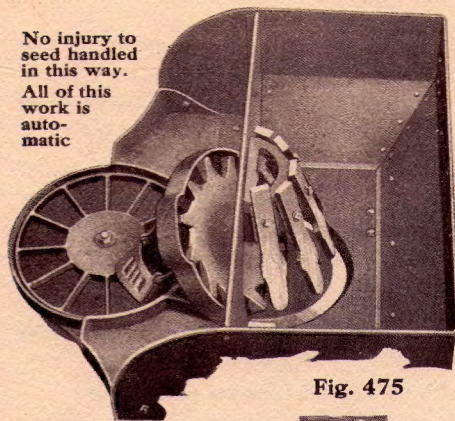


Fig. 475

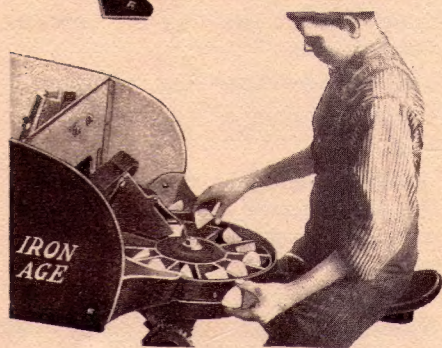


Fig. 186

The only way you can make sure—corrects doubles and misses—earns his way 10 to 20 times. The only hand work on the machine

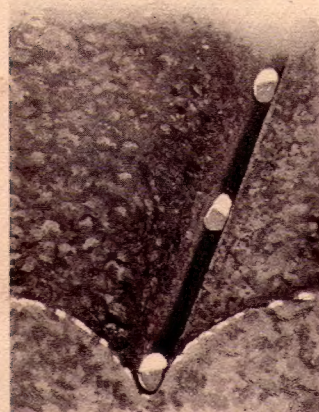


Fig. 187

Potatoes don't roll in this groove. Straight rows, even spacing

Ninety-nine men out of every hundred who grow potatoes are looking for results. The other fellow is a puzzle. But for the ninety-nine here is the right start—and that's half the race, Mr. Potato Grower. It is an automatic

machine planter that places every seed piece exactly as you want it

without a miss or a double and without injury. The result is, every hill planted at the right depth, the right distance apart and covered level or ridged. No skips to eat up profits nor doubles to waste seed or decrease size of potatoes.

The work is automatic, with an extra seat provided for the boy or man who makes corrections.

The seed is shaken on a loose bottom

between wooden fenders into the pockets of an elevator wheel and then, through a short spout, to corresponding pockets in the feed wheel. (Fig. 475.) There are no pickers to stab the seed pieces and cause them to rot.

Here is where the boy has his innings. As the feed wheel revolves he simply takes one seed piece from the pocket where there are two and puts one where there is none. (Fig. 186.) That boy is the "ounce of prevention." He wards off the 5 to 20% loss that other planters cannot avoid. Paying him or a man \$2.00 a day (and you know that's the limit) means a cost of only 40 cents an acre. And that

40 cents brings in a sure return of \$5 to \$50.

Don't take our word for it alone—look for proof—and get it from the man who uses an "Iron Age." Many men think it worth while to do this part of the work themselves. The boy does not place the seed—the planter does that and drops it

in a narrow wedge-shaped groove in the bottom of the furrow

where it cannot roll. (Fig. 187.) The groove keeps the hills in a straight line, for which you are truly thankful when you cultivate, spray or dig.

Steel Frame Potato Planter

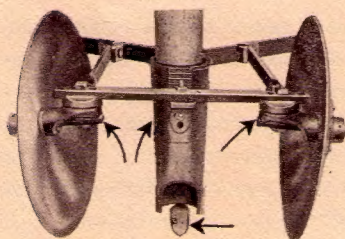


Fig. 326

Adjusts discs at any angle and width and the boot at any depth. See, also, shoe for seed groove

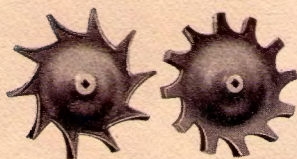


Fig. 329

Two out of three elevator wheels furnished with every planter. These are for large and small seed

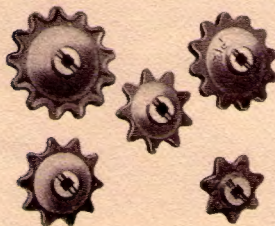


Fig. 480

Extra distance spacing sprockets for seed. Furnished with every planter

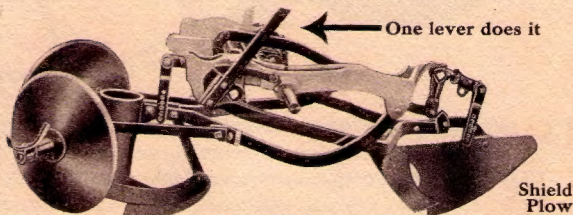


Fig. 476

One lever stops feeding of fertilizer and seed at same time, and raises gang from the ground

Depth of Planting

is the same throughout as set. The depth is regulated by raising or lowering the "boot" which shields the potato tube. The small shoe attached to the bottom of the "boot" makes the groove for the seed. (See Fig. 326.)

The Covering Discs

are also shown in Fig. 326. They can be set for width, angle and depth. They cover thoroughly from each side, and can ridge the crop, in any shape, if the grower wants it that way. (See also Fig. 266, inside back cover.) Potato seed should be covered properly, or the tubers will be exposed and "greened."

For Distance Between Seed

Each planter has six different sprockets, including the one on the machine, (Fig. 480) with which to space seed 12, 14, 15½, 17, 18½ or 20 inches apart. For any one of these we can substitute one that will space the seed 24 inches. No. 400 is set up at the factory to space 18½ inches. No. 404 is set up to space 17 inches.

For Different Size Seed

Each planter has three kinds of elevator wheels, including the one on the machine. Two are shown in Fig. 329. On No. 400 they are P180 for small seed, P179 medium, and P181 large. When ordered, we will substitute either P184 for still smaller seed or P183 for larger seed, or both for a like number of regular wheels. On No. 404, the regular wheels are P179 for small seed, P88 medium, and P87 large—special for very small seed, P180; for very large seed, P86.

These numbers are for machines built 1910 and since—other numbers apply for older machines.

The operator must tell by trial which wheel to use. If feeding too fast, use a wheel with smaller sprockets, and so on.

(Fig. 476), operated from the seat, throws the clutch that shuts off seed and fertilizer, at the same time raising the entire gang clear of the ground. This is good when trying to avoid stone or turning at ends of rows. Note also in this cut, adjustments for working depth of potato shoe and plow. Can be set for dead furrows or "backings."

The Regular Opening Plow

sent with the planter is known as the shield opening plow (See Fig. 476). It is steel, divides the soil for the plow and warns the driver, when it strikes "fast" rock, to release the lever so the plow will pass over. It will prevent clogging in somewhat trashy ground, but either single flat or double concave discs are provided in place of the shield plow for extreme cases. (See page 8.)

The Main Wheels

are steel with wide, slightly concave rims—interchangeable and have removable ratchet hubs which are cheaply replaced when worn.

Potato Planter—The New Steel Frame

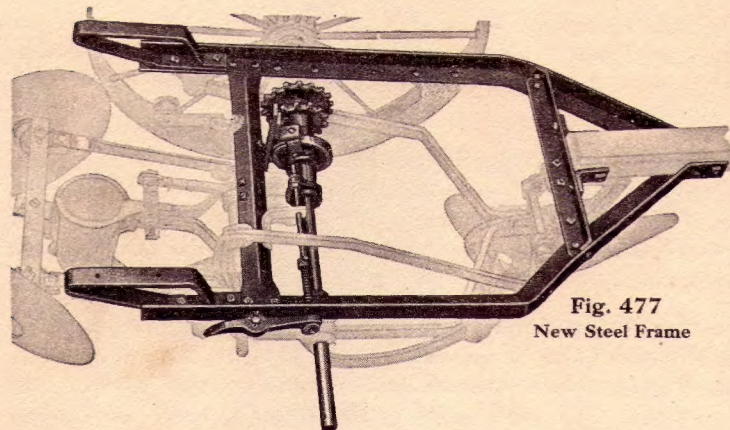
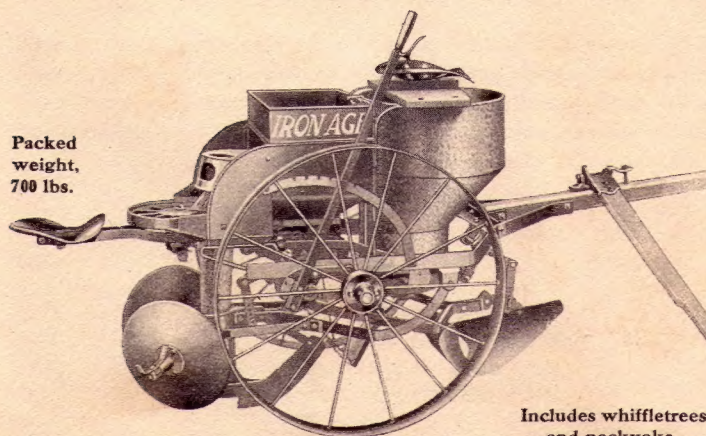


Fig. 477
New Steel Frame

With Greater Capacity While the majority of men who plant potatoes will not need one larger than No. 400, this larger machine, known as No. 400E is bound to become very popular with the growers who have 25 to 100 acres or more. Has large size fertilizer can (Fig. 459, page 6), and seed box extension (Fig. 479R, page 8).

Packed weight, 700 lbs.



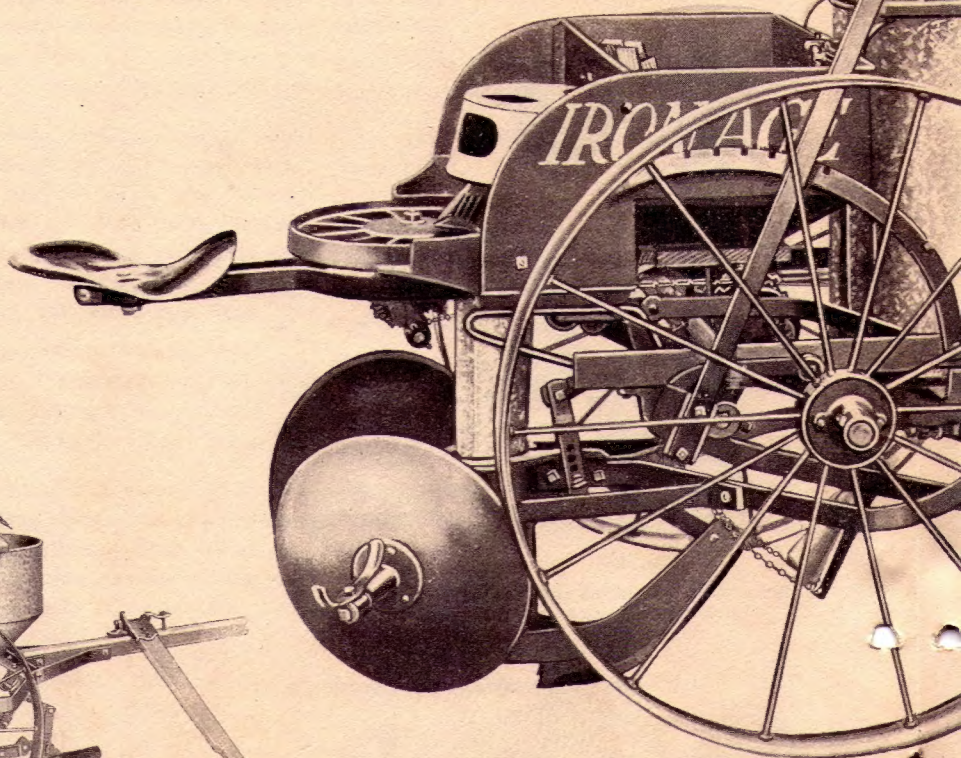
No. 400LE

With large fertilizer distributor and seed box extension.

Includes whiffletrees and neckyoke

Anyone can see how simple this construction is and if you know about angle steel you realize how much stronger, yet very much lighter, this frame-work is when compared to the big cast iron frame. And the whole machine has a much better appearance because of this clean-cut construction.

In the frame cut, note also the drive sprockets and clutch—strong and sure, so that they can be depended on.



- No. 400 —Without distributor, with shield plow...
- No. 400R —With regular distributor and shield plow...
- No. 400L —With large distributor and shield plow...
- No. 404 —Without distributor, with shield plow...
(for large cut seed)
- No. 404R —With regular distributor and shield plow...
- No. 404L —With large distributor and shield plow...

Many Combinations—Other Uses

A machine's value is determined, first by the way it does the work for which it was made, then by the ways in which it can be adapted to the need for greater or less capacity and to meet varying conditions of ground, soil, etc., and finally by the number of similar kinds of work it can do by using attachments.

We not only provide larger fertilizer distributors and an extension for the seed box, but many attachments as well.



Making up rows for cabbage

You men that have "*Iron Age*" Planters have not fully realized the true value of your machine, unless you have a corn, bean and pea attachment, and the expense is so small that it does not cost much to find out.

Even if your potato planter, as such, has paid for itself many times over, there is no reason why you should not get double or treble its value by using the many practical attachments. It isn't good judgment to let a machine stand idle if you can keep it going.

Price includes
whiffletrees
and neckyoke

No. 400R
With regular fertilizer distributor

Packed weight, 681 lbs.



Planting corn with the seed attachment.
Page 7 shows spacing of the grown crop

- No. 400RA —(No. 400R with single disc plow, Fig. 142, page 8).....
- No. 400RB —(No. 400R with double disc plow, Fig. 218, page 8)....
- No. 400LE —(No. 400L with extension, Fig. 479, page 8).....
- No. 400LW —(No. 400L with wide plow, Fig. 442, page 8).....
- No. 400RS —(No. 400R with seed attachment, Fig. 267, page 7).....

No. 404 is exactly same as No. 400 except that it is fitted for large cut seed, not less than four ounces.

Potato Planter—The New Steel Frame

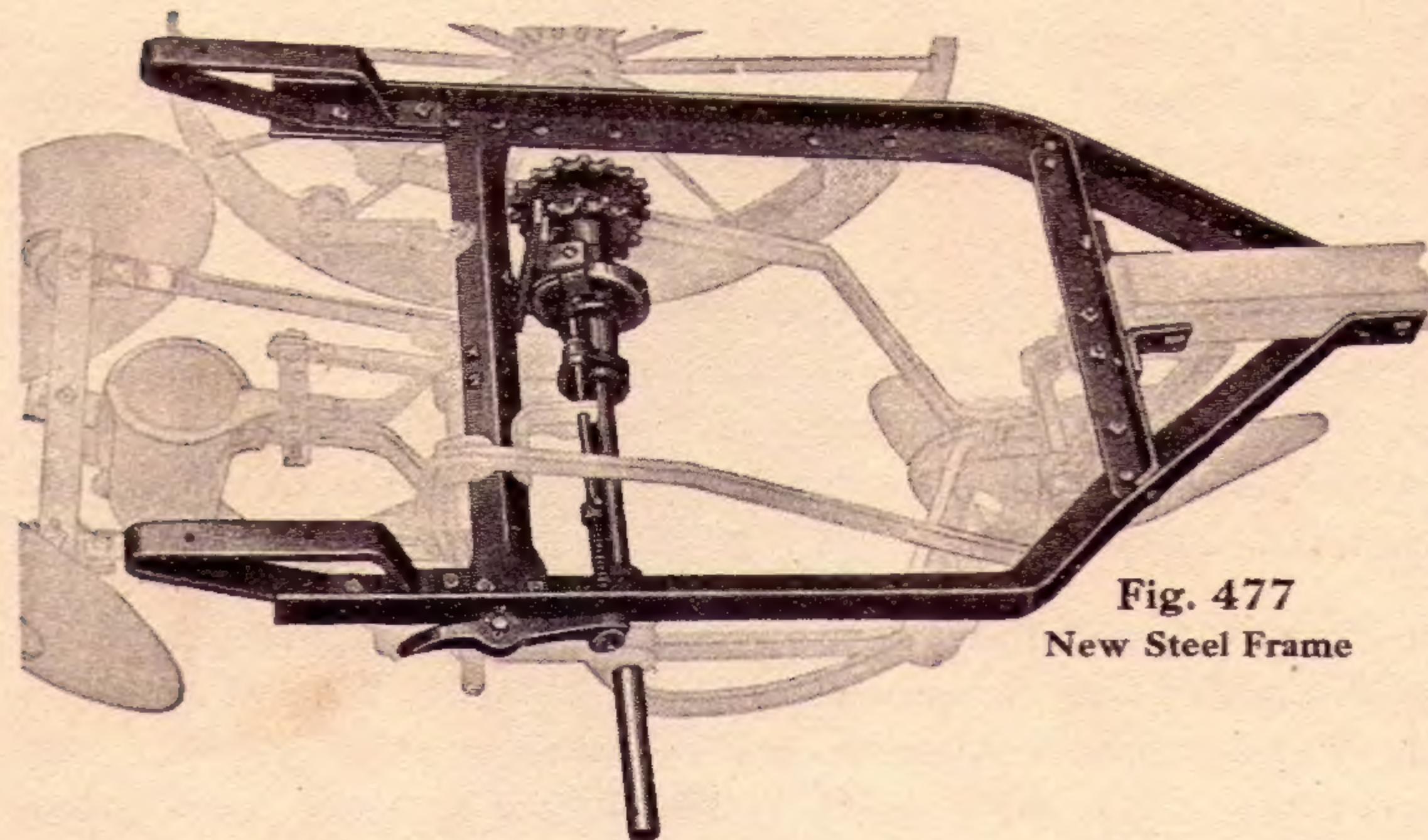
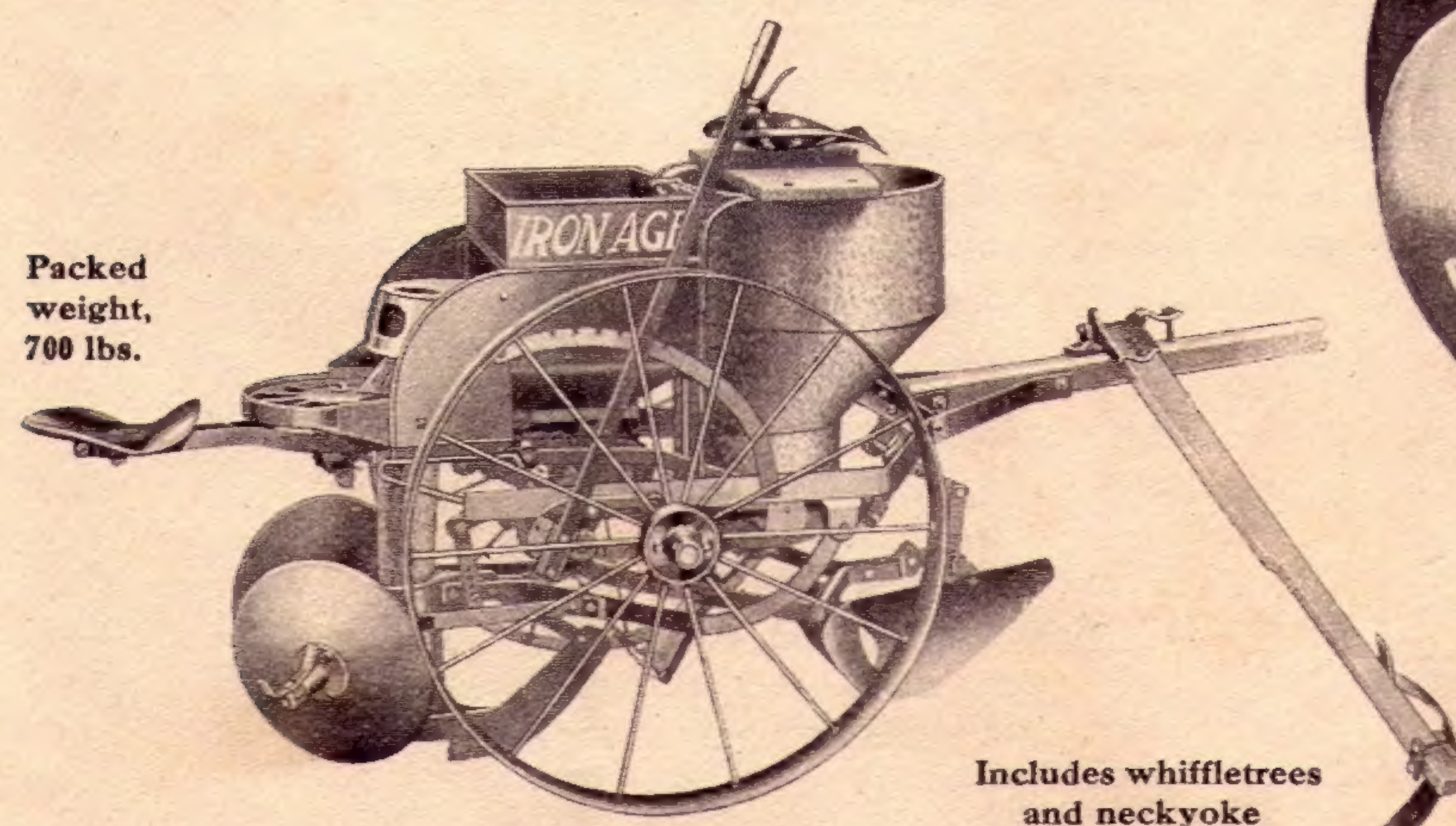


Fig. 477
New Steel Frame

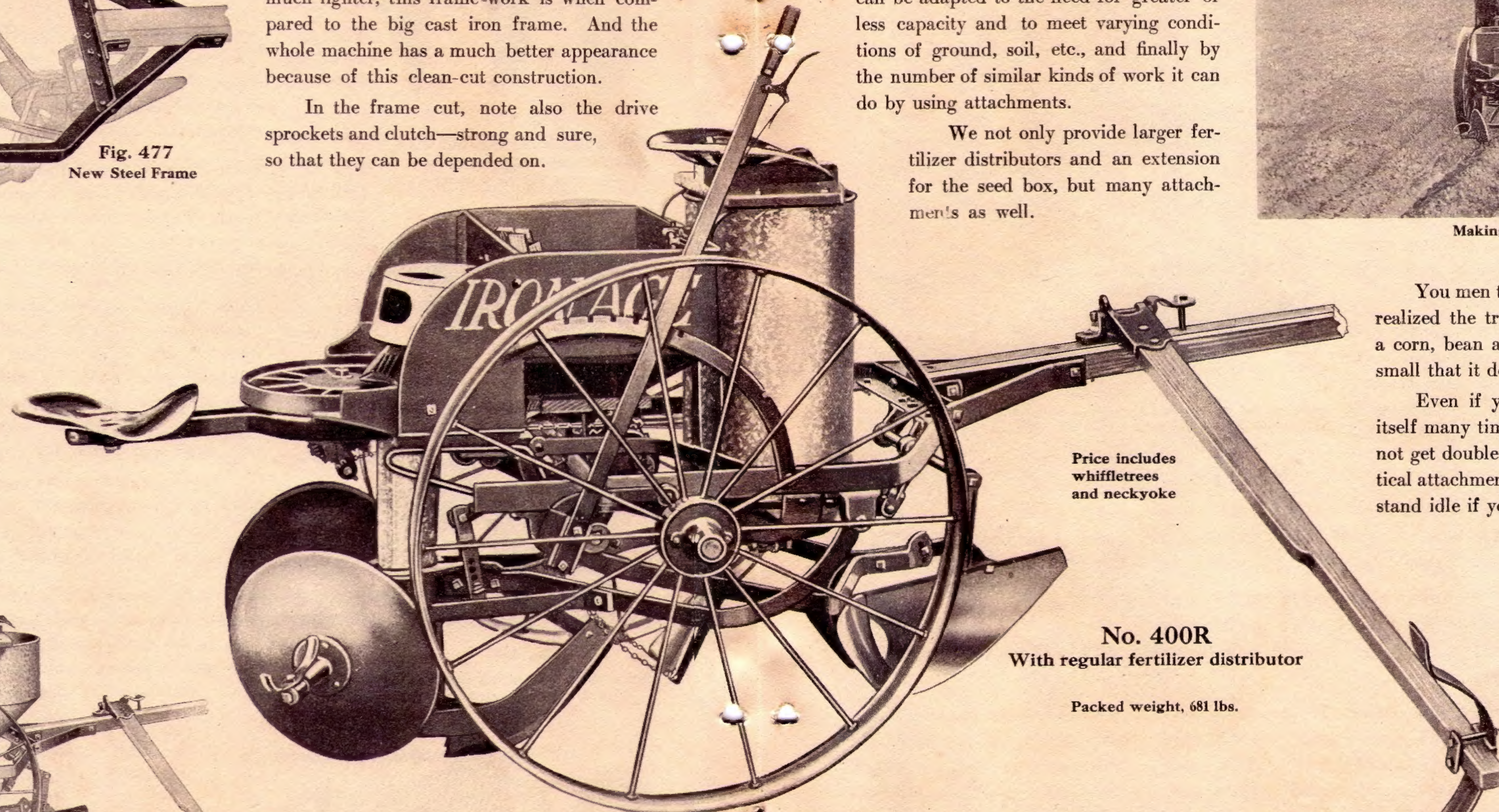
With Greater Capacity While the majority of men who plant potatoes will not need one larger than No. 400, this larger machine, known as No. 400E is bound to become very popular with the growers who have 25 to 100 acres or more. Has large size fertilizer can (Fig. 459, page 6), and seed box extension (Fig. 479R, page 8).



No. 400LE
With large fertilizer distributor and seed box extension.

Anyone can see how simple this construction is and if you know about angle steel you realize how much stronger, yet very much lighter, this frame-work is when compared to the big cast iron frame. And the whole machine has a much better appearance because of this clean-cut construction.

In the frame cut, note also the drive sprockets and clutch—strong and sure, so that they can be depended on.



No. 400R
With regular fertilizer distributor

Packed weight, 681 lbs.

- No. 400 — Without distributor, with shield plow....
- No. 400R — With regular distributor and shield plow..
- No. 400L — With large distributor and shield plow....
- No. 404 — Without distributor, with shield plow....
(for large cut seed)
- No. 404R — With regular distributor and shield plow..
- No. 404L — With large distributor and shield plow....

- No. 400RA — (No. 400R with single disc plow, Fig. 142, page 8).....
- No. 400RB — (No. 400R with double disc plow, Fig. 218, page 8)....
- No. 400LE — (No. 400L with extension, Fig. 479, page 8)
- No. 400LW — (No. 400L with wide plow, Fig. 442, page 8).....
- No. 400RS — (No. 400R with seed attachment, Fig. 267, page 7).....
- No. 404 is exactly same as No. 400 except that it is fitted for large cut seed, not less than four ounces.

A machine's value is determined, first by the way it does the work for which it was made, then by the ways in which it can be adapted to the need for greater or less capacity and to meet varying conditions of ground, soil, etc., and finally by the number of similar kinds of work it can do by using attachments.

We not only provide larger fertilizer distributors and an extension for the seed box, but many attachments as well.

Many Combinations—Other Uses



Making up rows for cabbage

You men that have "Iron Age" Planters have not fully realized the true value of your machine, unless you have a corn, bean and pea attachment, and the expense is so small that it does not cost much to find out.

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Planting corn with the seed attachment.
Page 7 shows spacing of the grown crop

Two Sizes Fertilizer Attachments

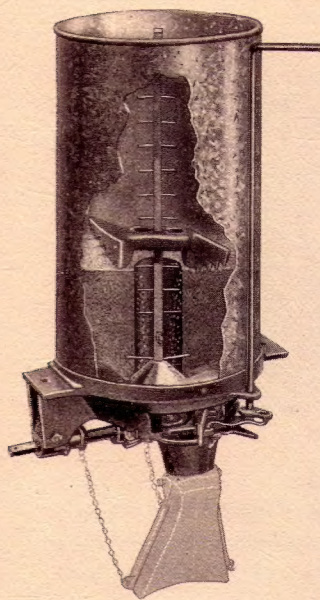


Fig. 458

Regular fertilizer distributor. Shipped with spreader and chains if for planter without any fertilizer attachment.

If wanted to change old style to force feed, sent without spreader and chains

Our
Fertilizer
Distributors

Sows
Fertilizer
Same
Trip

To Further
Regulate
Fertilizer,

have always been very successful. They distribute all kinds of fertilizers thoroughly and without waste. A winged scraper, placed on top of the fertilizer, drops by its own weight as the material feeds from under it. The shaft with its steel cross pins revolves the scraper and keeps an open space in the center—the fertilizer falls light and loose on the cone and is forced to the spreader by a feed wheel. The amount is regulated from the seat by a lever—saves waste when turning at the ends of rows.

as for planting, but none of it is allowed to touch the seed. The fertilizer is spread in a 6 or 8-inch stream across the furrow, just back of the plow—the seed shoe cuts a groove through this, at the same time mixing the fertilizer and soil thoroughly. The seed drops into the groove where there is no fertilizer. (See Fig. 327.)

we provide three extra sprockets and extra chain, shown in Fig. 481. The smaller sprockets feed faster.

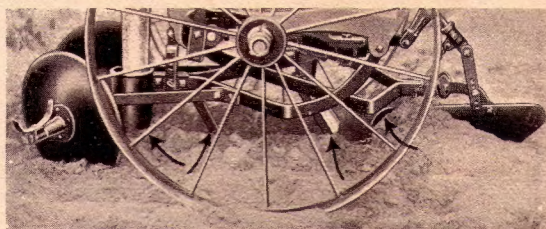


Fig. 327

From the right note opening plow, fertilizer spreader, seed shoe and potato tube. Fertilizer does not touch seed

The Two Sizes

fertilizer attachment and is the one you will get where distributor is specified but no size is given. It holds a trifle over half a sack of fertilizer. Complete machine should be ordered by adding "R" to the number, as No. 400R.

Furnished as an attachment for old or new "Iron Age" Planters. Price, complete for planters that do not have distributors, For parts necessary to change from old style distributor to new force feed, order as Fig. 458C,

Fig. 458
is the
Regular

Fig. 459
is Our
Large Size

fertilizer attachment. It holds a full sack. You don't have to stop and fill so often and, in most cases, you can finish your long rows and not have to fill in the middle of the row. It is same in construction as the smaller size. Complete machine with this size should be ordered by adding "L" to the number, as No. 400L.

This size will also be furnished as an attachment for old or new machines. Order as Fig. 459. Price, complete with spreader and chains for planter without distributors, Without spreader and chains, if for changing from regular to large size, order as Fig. 459C.

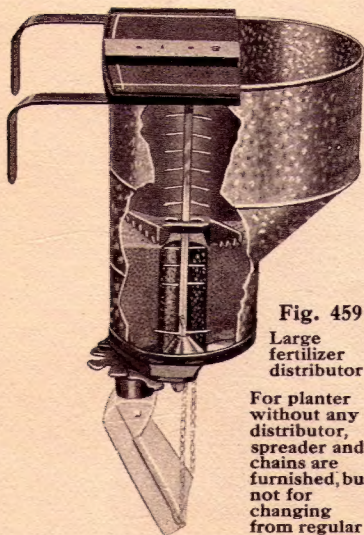


Fig. 459
Large
fertilizer
distributor

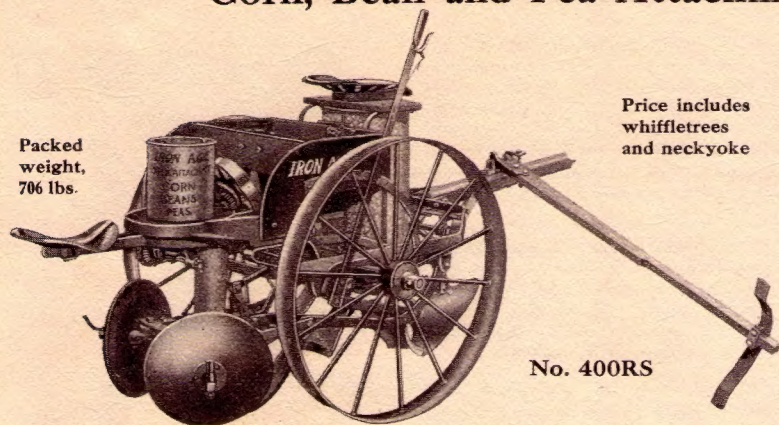
For planter without any distributor, spreader and chains are furnished, but not for changing from regular to large size



Fig. 481
Chain and three
extra sprockets
furnished with
every fertilizer
distributor

Corn, Bean and Pea Attachment for Planter

Packed weight,
706 lbs.



Price includes
whiffletrees
and neckyoke

No. 400RS

This 100% machine isn't built just for planting potatoes alone. It stands right out in the limelight as a corn, bean or pea planter. The attachment is easily applied in place of the feed wheel. Sows in continuous rows or will drop corn or beans in hills at 12, 14, 15½, 17, 18½ or 20 inches apart. The right amount in a hill, too—never a miss or a whole handful in one place.

The average one-row corn planter costs about \$17. This attachment is only \$6.25

With regular fertilizer distributor and corn, bean and pea attachment

and it is every bit as practical and efficient. The work is all automatic.

The planter opens the furrow, spreads fertilizer, makes the groove, sows the seed and covers level or in ridges.

In addition to the galvanized can the attachment includes frame and adjustable brush which pushes the surplus seed from the openings in the seed plates, an adjustable gate which regulates flow of pea seed, and set of six plates—five for corn and beans and one corrugated plate for peas. Two special seed plates are made for bush lima beans. These were not made until 1912, but their introduction has increased one dealer's sales materially.

To Drop Seed Farther Apart

use Fig. 296. The plates are the same as those furnished regularly except that alternate holes are plugged and seed can be dropped at 24, 28, 31, 34, 37, or 40 inches apart. They may be ordered in place of those shown in Fig. 267. Or, if wanted in addition to Fig. 267, they cost By using one of the small extra fertilizer sprockets (Fig. 481, page 6) on the feed wheel shaft, seed can be dropped closer than 12 inches.

Truckers

use the seed attachment to sow succession plantings. Dairy-men use it to sow fodder corn and also use the planter without the attachment to make up rows for root crops.

This and other attachments make the planter useful

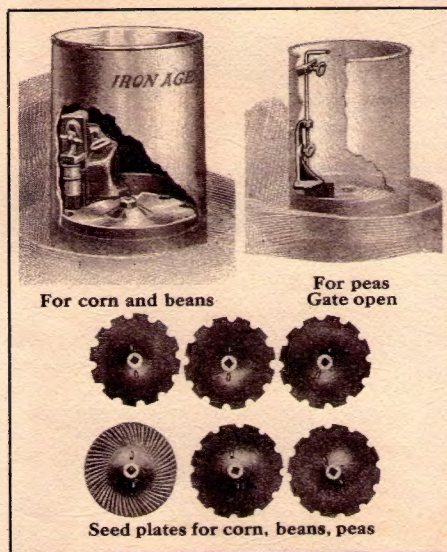


Fig. 267. Corn, bean and pea attachment.

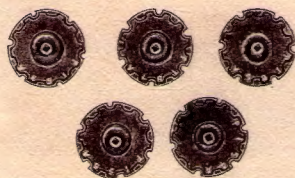


Fig. 296
Double distance seed plates.

throughout the season. The work is all accurate and quickly done. Each job is finished completely in one operation. The extra expense is trifling compared to the benefits. We think it worth trying. Don't you?



Planted with this seed attachment. Note even spacing



BATEMAN MFG CO.
GRENLOCH, N.J. U.S.A.

IRON AGE

SEVENTY-EIGHT
YEARS IN BUSINESS



Other Attachments for Potato Planter

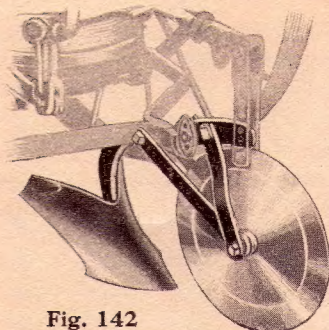


Fig. 142
Single disc opening plow, shown
by solid parts.

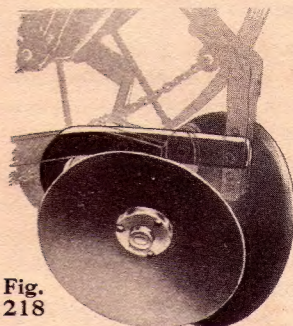


Fig. 218
Double disc opening plow, shown
by solid parts.

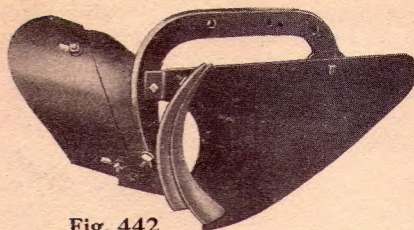


Fig. 442
Wing shield opening plow.



No. P145
Special fertilizer wheel
—increases amount
sown.

Four styles of plows are made for opening furrows. The choice is yours and in each case the soil is left loose on each side of the furrow. All of them can be set for depth. The shield opening plow, described on *page 3, Fig. 476*, is usually shipped, because it is best for most kinds of soil. It may be ordered as an attachment including only parts necessary to change from *Fig. 142* or *Fig. 218*.

The Single Disc Opening Plow

Fig. 142 is for use in extremely trashy ground and long vines. The disc does better work and eases the draft for the plow. If wanted on new machine, order by adding letter "A" to the number, as No. 400A.

Double Disc Opening Plows

Fig. 218, show up best where cow peas or other growth has been plowed under (as is common in the South). The discs open a path that permits the planter to pass without interference in any way. If wanted on new machine, order by adding letter "B" to the number, as No. 400B.

Wing Shield Opening Plows

are sometimes needed in light sandy soils so that the extensions will open up wider furrows. This gives more chance for fertilizer to spread across the bottom of the furrow and it is more thoroughly mixed with the soil. It is especially necessary when you put on 1500 pounds or more of fertilizer to the acre. If complete machine is wanted this way, add letter "W" to the number, as No. 400W,

For Sowing More Fertilizer

per acre than is provided in the regular equipment, order star wheel No. P145. It increases the amount materially and will be furnished on new planter in place of P145A when so ordered.

For Smoothing and Leveling Rows

you will find *Fig. 295* well worth the price. It is adjustable for height.

The Seed Box Extension

increases the capacity one-half. New machines will be furnished with the steel extension by adding the letter "E" to the number, as No. 400E.

If extension is wanted as an attachment for 1914 No. 400 or No. 404 Planters, order *Fig. 479R*. If for any previous year's machine without fertilizer attachment, order *Fig. 460*. If for 1913 planter, with fertilizer attachment order *Fig. 460R*, (includes rod)

If for 1912 and before, with fertilizer attachment, order *Fig. 460RS* (includes rod and set of seat irons).

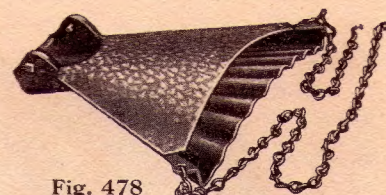


Fig. 478
Special wide spreader.

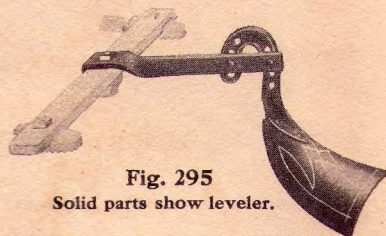


Fig. 295
Solid parts show leveler.

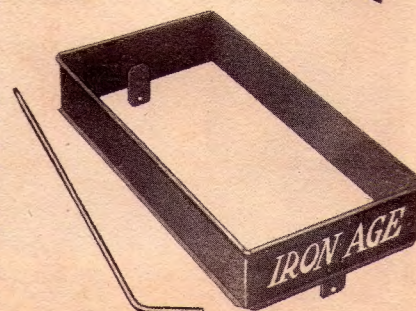


Fig. 479R
Extension for seed box on 1914 planters.

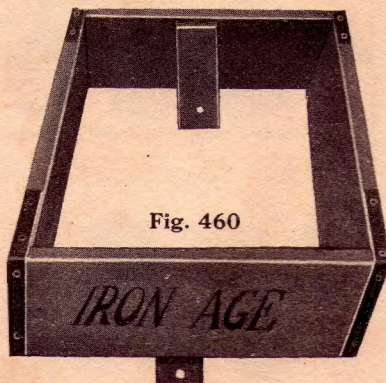


Fig. 460
Extension for seed box, on wood box
planters made previous to 1914.

Side Dressing and Ridging Attachments for Planter

Solid part shows attachment from 1910.

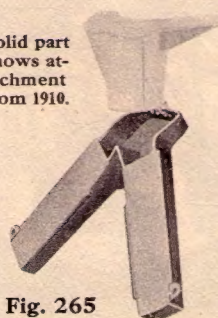


Fig. 265

For Side Dressing

order Fig. 265, Double Spreader. Puts quick acting fertilizers, such as nitrate of soda, where they will do the most good—on each side of the growing crop. This forces the crop to early maturity, and you can get to market when prices are high. This has become a common practice with market gardeners. The crop is more tender and has a readier sale. Our fertilizer distributor handles nitrate of soda in good shape. The holes at top of spreader will adjust it so that fertilizer will fall in the center and be divided evenly, no matter how much you sow. For machines built previous to 1910, order Fig. 265S spout with spreader for which you pay, price (complete),

With Special Ridging Attachment

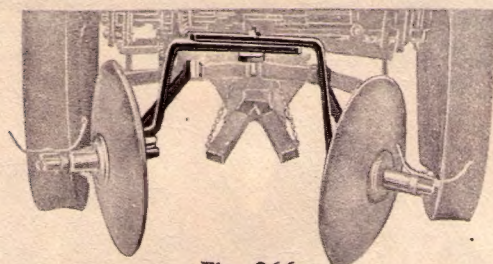


Fig. 266

Solid parts show special ridging attachment for working astride rows

Fig. 266, you can ridge your potatoes at the same time you are side-dressing the plants. Many growers in Maine and elsewhere find this necessary. The attachment can be furnished for any "Iron Age" Planter. Potato tube and boot are removed when using the ridger.

About an hour and a half per acre is all that is necessary to side dress and ridge.

We will be glad to furnish copy of an interesting article on this ridging system, written by a grower who has used it many years with unvarying success. Your conditions may not demand it, but if they do this article will be valuable. Every progressive grower aims to better his productions with as little work as possible, and he does not hesitate to change his method where there is reasonable chance of improvement.

There is considerable point in this man's application of fertilizers so that there will be no loss in taking up the nitrogen.



"IRON AGE" (Improved Robbins) Planter making second application of fertilizer, covering it and ridging the potatoes at the same time

